APRIL/MAY 2024

23UIM21 — OBJECT ORIENTED PROGRAMMING CONCEPTS USING C++

Time: Three hours

Maximum: 75 marks



SECTION A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

- 1. Summarize the term OOPS.
- 2. Define inline function.
- 3. How to declare object in C++?
- 4. Define destructor.
- 5. When should you use type conversion?
- 6. Define abstract class.
- 7. When should you use pointer?
- 8. Define polymorphism.
- 9. How to define binary file?
- 10. Summarize the term string attributes.

SECTION B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions.

11. (a) Write and explain the various types of loops statements in C++.

Or

- (b) Write notes on function Overloading.
- 12. (a) Develop an activity to implement friend function.

Or

- (b) Explain the types of constructor.
- 13. (a) Compare unary and binary operators.

Or

- (b) Explain the virtual base class.
- 14. (a) Elucidate the role of pointers.

Or

- (b) Examine the various memory models.
- 15. (a) Write the steps for File Stream Classes.

Or

(b) Explain in brief on sequential read/write operations.

SECTION C - (3 × 10 = 30 marks)

Answer any THREE questions.

- 16. Write and explain the types of control structures.
- 17. Formulate the steps for classes and objects.
- 18. Compare and contrast the types of inheritance.
- 19. Write notes on:
 - (a) Polymorphism
 - (b) Virtual functions
- 20. Discuss briefly about the various types of templates.